

# Widening Access to Energy Savings: Using On-Bill Financing to Bring Comprehensive Projects to Hard-to-Reach Customers

*Danielle Geers and John Rosendo, PECO  
Alfred Gaspari and Yuri Yakubov, Pacific Gas & Electric*

## ABSTRACT

PECO's EnergySmart Grocer (ESG) program has implemented a comprehensive energy efficiency (EE) program targeting mid-to-large size grocery stores and supermarkets for Pacific Gas and Electric (PG&E) customers. Since 2012, the introduction of the utility's On-Bill Financing (OBF) option to the ESG program has allowed ESG to more effectively engage hard-to-reach customers with small margins to commit to more expensive projects with a longer payback period. Together, ESG and PG&E have successfully leveraged this financing option to increase the comprehensiveness of energy efficiency projects, resulting in deeper savings on a larger scale.

This paper will focus on how ESG integrated OBF into a target market approach for grocery stores in order to increase the size and scope of individual projects, thereby overcoming financial barriers to drive more complex measure adoption. ESG has built a program on a high-touch market engagement model that targets the entire community of market partners (e.g. contractors, manufacturers, distributors and industry associations) and utilizes available resources, such as financing, to deliver high volume and comprehensive energy savings that support market transformation.

## Introduction

The availability of OBF facilitated through utility agencies presents many benefits for rate-payers, including helping to offset upfront costs of capital improvement projects and the convenience of re-paying the loan through an existing bill. An added benefit of the OBF program is that it matches the estimated monetary savings from the energy efficiency project with the monthly repayments, creating a bill neutral project. When the ability to repay a loan on the utility bill is combined with zero percent interest and bill neutrality, the combination of benefits makes energy efficiency an easier sell.<sup>1</sup>

The introduction of PG&E's OBF program presented a unique opportunity for hard-to-reach customers segments, such as grocery stores and supermarkets, to finance energy efficiency retrofits that otherwise would not have been affordable. OBF became available to ESG customers late in 2011. ESG recognized the great potential in leveraging existing relationships with customers to facilitate the widespread adoption of OBF and the completion of more complex, comprehensive projects resulting in overall greater energy savings.

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<sup>1</sup> Lawrence Berkeley National Lab is currently working on a paper that undertakes an in-depth study of OBF programs throughout North America. The study will include the differences and similarities of OBF programs at various utilities, as well as the pros and cons of various program design features. The paper is still in draft form and can therefore not be cited at the time of the writing of this white paper.

However, the launch of OBF presented a number of initial challenges for PG&E and ESG. Customer uncertainty combined with administrative processes acted as barriers. In order to address these challenges, ESG and PG&E developed the following strategies:

- Define the application process
- Inform the project scope
- Involve stakeholders to improve program design
- Engage market partners

This paper will explore how these strategies were employed to achieve more comprehensive savings, develop large-scale projects, and create a streamlined administrative process. A specific example of the success of these strategies has also been included. Not only are these strategies applicable to other utility-run OBF programs, but they can be applied to future financing programs administered by PG&E and other energy efficiency program implementers.

### **PG&E On-Bill Financing Program**

California's four Investor Owned Utilities<sup>2</sup> (IOUs) administer OBF programs throughout their service territories in the state. While there are some minor differences between the IOUs OBF programs<sup>3</sup> the programs are fundamentally similar to PG&E's OBF program, which is a Revolving Loan Fund (RLF) sponsored by California utility customers and administered by PG&E under the direction of the California Public Utilities Commission (CPUC). OBF provides qualified, non-residential PG&E customers with a means to finance energy efficiency rebate and incentive programs implemented under select PG&E energy efficiency programs. The loans issued under OBF are interest-free and do not have fees.

For business customers, including commercial, industrial and agricultural customers, loans can range from \$5,000 to \$100,000 per customer premise with a maximum loan term of 60 months, or five years. Business customers are also limited to \$1 million in outstanding OBF loans across all facilities at a given time. Since the program's inception in 2011, PG&E has funded 680 loans for \$28.9 million. Of that \$28.9 million, \$8.3 million has been repaid and default rate is zero percent (PG&E, 2014).

### **EnergySmart Grocer Program**

Grocery store facilities are among the top three facility types for energy use intensity and number one for electrical use intensity, making them ideal targets for energy efficiency (CBECS, 2003). However, with low profit margins, typically between one and three percent, it can be difficult for grocers to make large investments that result in significant energy savings to benefit their overall bottom-line (Agnese, 2010). In addition, refrigeration systems are highly complex and diverse, making it challenging to identify and implement energy efficiency measures. These factors have made grocery stores a hard-to-reach market segment for energy efficiency.

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<sup>2</sup> The four California IOUs are PG&E, Southern California Edison (SCE), Southern California Gas (SCG), and San Diego Gas and Electric (SDG&E).

<sup>3</sup> Some of these differences include: SCE and SDG&E limiting loans going to mostly lighting measures to three years, per-customer dollar limits on loans, and the way that loans are processed.

PECI's EnergySmart Grocer Program has been serving grocery store and supermarket customers to overcome these barriers in the PG&E territory since 2006. ESG developed a model specifically designed to address the needs of this hard-to-reach customer segment through the deployment of Field Energy Analysts (FEAs). FEAs provide personalized customer support and have the technical knowledge to identify comprehensive energy savings with an emphasis on refrigeration, which typically makes up two thirds of a grocery store's energy use. FEAs provide comprehensive facility audits, identify energy efficiency measures and help prioritize projects based on the individual needs of the customer.

The program provides incentives for a comprehensive set of deemed measures, including refrigeration, lighting, HVAC and food service. These deemed measures consist of a unitized savings measurements based on the Database for Energy Efficiency Resources (DEER), or other utility approved measures. Historically, ESG has delivered more than 80 percent of energy savings through refrigeration measures (PECI, 2013).

ESG engages with customers on a long-term basis through the program's Inform to Invest model. Typically, customers complete less expensive measures with a higher return on investment first. Using the resulting savings of their initial project, FEAs will guide customers toward more complex, more expensive projects that yield high savings. Additionally, ESG has helped customers complete more comprehensive projects by acting as a coordination point between various specialized contractors.

## **Initial Challenges**

The introduction of new financing options can often result in upfront challenges and slow start-up. Following the 2011 PG&E OBF launch, ESG and PG&E experienced internal and external barriers to facilitating customer adoption. Customers experienced uncertainty around the loan process and processing timeline. For PG&E, inexperienced as a lender, the combination of creating new administrative processes and resource constraints created confusion for customers and delays in processing. These factors acted as barriers to initial customer enrollment in the OBF program.

## **Customer Barriers**

Although the ESG Inform to Invest model helped grocers identify energy savings opportunities, they were restricted by the availability of capital to invest in large-scale comprehensive projects. Typically, a grocer might have enough funds available to complete only one to two energy efficiency measures per project. As the cost savings from the initial retrofits are recognized, the customer can invest those savings into more complex projects. Depending on the return on investment, this process can take up to several years. The introduction of OBF provided a solution to enable grocery customers to afford multi-measure complex retrofits resulting in larger savings in a shorter time period.

However, PG&E grocery customers still faced a number of barriers when initially introduced to OBF primarily due to programmatic issues. Despite the appeal of zero percent financing and energy bill neutrality, the uncertainty of the funding process timeline and the OBF program requirements prevented customer adoption. Overall grocery customers were reluctant to commit to a large-scale project without understanding the process and assurance of eligible and timely funding.

As part of the OBF application, projects are required to demonstrate a payback of five years or less in order to qualify for funding. The application also required upfront project information, such as the individual measure information, including kWh savings per unit, incentives, and annual cost savings. In most cases, the final project details varied from the initial approved scope as changes are common with complex grocery retrofits. Customers did not have access to the individual deemed measure information or tools necessary to calculate costs savings and payback. Additionally, customers were reluctant to commit without fully understanding how potential changes to the project scope would impact loan eligibility and the OBF monthly repayment.

The OBF process also lacked clarity around expected timeline and length of the process. Although stages of the process were in place, the initial projects took over six months to complete. The uncertainty of the timeline made customers hesitant to apply as they were reliant on OBF to fund projects that they otherwise could not afford. Grocery customers were not willing to take the risk of completing a large-scale project without assurance that payment would be received in a timely manner.

### **PG&E Administrative Barriers**

In order to deliver an OBF project, there are many parties involved from PG&E, ESG, customer and the installation contractor. Within PG&E the Third Party Program Manager acts as ESG's single point of contact for all contract and delivery related issues. Large energy usage customers, such as grocery stores, will have a PG&E Customer Relationship Manager that oversees issues like outage management, rate selection, and energy efficiency projects involving PG&E rebates and incentives. The OBF Program is managed by a Program Manager within the Products and Programs Organization. The OBF Loan Operations processing team works in Enrollment and Incentives Management, and handles all loan processing from initial credit check to check issuance. The ESG program is administered by a Program Manager and Project Coordinator within PECEI who work together to deliver the ESG program. The ESG team coordinates all work with contractors and the customer on projects utilizing the ESG program. With such a large number of stakeholders and moving parts within each project, communication and clarity around processes is crucial, but was not always present.

The complexity of the OBF program and many of the customer barriers described in the previous section derive from the administrative barriers faced by PG&E in setting up a loan program within a large utility not accustomed to being a lender.<sup>4</sup> The OBF program was designed to layer on top of PG&E's existing rebate and incentive programs, such as the ESG program. However, since OBF is a loan obligation, it requires a higher level of underwriting and due diligence than the normal incentive process. The program created additional processes that would layer these requirements into the incentive process while trying to avoid an increase in processing times. Initially, this layered process created multiple paths through which the OBF loan could go through. The paths included one each for PG&E sales, Third Party Programs, and Government Partnerships – with multiple sub-processes for various types of projects within each channel. Internally at PG&E, new processes needed to be set up to conduct standardized credit

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<sup>4</sup> PG&E had a residential lending program in the early-1980s that was called ZIPS, but that program was substantially different from OBF and existed in a different economic environment. For those reasons, there were not many applicable lessons from PG&E's previous experience for setting up OBF.

checks, create loan agreements, and issue loan checks. At times, the combination of these issues led to long processing times and stakeholder confusion.

The OBF Loan Operations team is staffed by a small team and the loan process is very manual. Due to this, processes were initially not set up to process a large amount of applications at the same time. The loan process is very manual for the OBF operations team. In order to improve OBF project processing time for projects involving deemed measures, such as projects submitted by ESG, the decision was made in the summer of 2013 to rely on the deemed savings for the loan payback calculations. This decision allowed for the removal of the additional engineering review to speed up processing times. This meant that the review was brought in-house to the OBF operations team through the use of an Excel based workbook that checked for the accuracy and completeness of each application. If the submitted information is complete and accurate, each project can be processed and have a loan agreement issued in under 30 minutes. However, any variations between the submissions and the internal data are reviewed by the OBF Program Manager. This can create delays for the processing of applications and the ability to grant permission for the projects to move forward. This review process highlights the importance of the customer and/or implementer submitting complete and accurate application packages.

## **Implementation Strategies**

Both parties recognized the substantial potential benefits OBF could provide to cash-strapped grocery customers. PG&E and ESG collaborated to overcome both the external customer barriers and internal administrative challenges for each stage of the process. PG&E focused on OBF program design improvements and worked with ESG through the Third Party Program Manager to streamline the application process to allow for a larger volume of projects to be approved in a shorter period of time. ESG leveraged existing relationships with customers and market partners to scope successful OBF projects with a more comprehensive measure mix. These strategies provided grocery customers with access to OBF to achieve comprehensive and deep energy savings on a large scale.

## **Defining the Application Process**

ESG and PG&E worked together to clarify the OBF application process to reduce uncertainty and better serve the needs of grocery customers. The OBF loan application process presented several barriers to customer adoption, including the uncertainty of the loan terms and the inability to process large volumes of project applications in a timely manner. ESG and PG&E focused on defining key elements of the application process to improve processing timeline and scaling capabilities.

The initial OBF payment history screening application required minimal information to begin the process. Once the customer was approved and the project scoped, the customer could secure the loan funds for the project. Informal contractor and vendor bid estimates were used to inform the expected loan amount; however, these estimates often varied from the total final project costs once installation was complete. As a result, there was a potential for a large variations between the initial pre-installation OBF loan terms and the final post-installation OBF

loan terms.<sup>5</sup> PG&E recognized this potential for variations and had processes in place to accommodate any changes to the loan amount as long as the project continued to meet OBF program eligibility requirements. Even with this assurance, the potential variation in loan terms presented a financial risk to customers as they were not able to anticipate how much of the total project cost would be covered by the final loan. In order to help make customers and contractors more comfortable with the overall OBF process, PG&E began requiring formal contractor and vendor quotes to be submitted as part of the application. This helped to solidify the loan terms and prevent large discrepancies, which helped to mitigate customer dissatisfaction. PG&E and ESG were able to improve forecasting of loan terms in order to provide customers with greater confidence of the final OBF loan amount.

The initial application process was designed to support a customer submitting a single project application at a time. Project details were reviewed and approved on an individual basis which presented a barrier for customers and Implementers interested in utilizing OBF to scale projects across a large number of sites. To resolve this issue, PG&E and ESG worked together to develop a process to submit projects in batches of 10 or more store sites. These batches were then broken into smaller groupings of stores that could be staggered to match the project stage. Once ESG completed pre-installation surveys for a small group of stores, those would be submitted and approved by the time the next group was ready for submittal. The OBF approval process flow was able to match the contractor's project stage and allow uninterrupted project execution. The batch submittal process facilitated a greater number of projects to be reviewed and approved simultaneously and resulted in a larger volume of projects to be completed.

### **Informing the Project Scope**

Grocery customers experienced uncertainty around creating a project scope that would be approved for OBF financing. Customers lacked the necessary information and tools to complete an OBF project application meeting the payback and loan cap requirements. ESG employed several strategies to assist in the project scoping process, including leveraging existing facility data and combining measures with higher and lower payback periods. These strategies were successful not only in developing projects that would meet the OBF requirements, but also in achieving more comprehensive, deeper energy savings.

As part of the program offering, ESG had completed facility audits for grocery customers to identify and recommend energy efficiency measures. The audit data included detailed records of existing refrigeration, lighting and HVAC systems as well as opportunities for energy efficiency retrofits. ESG used available audit data to create a project scope and inform the OBF application with measure quantities, incentives and energy and costs savings per unit. The prepared project scope benefitted the overall project processing timeline as contractors were able to use the information to provide bids in a shorter period of time. The OBF approval timeline was also shortened by having the application closely aligned with project bids and final installation counts. By leveraging existing audit data to complete the OBF application, ESG was able to ensure the project scope would meet the requirements of the OBF program, resulting in a more streamlined review process.

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<sup>5</sup> The final loan terms have been as small as 1/10<sup>th</sup> of the original requested amount and as large as double the original amount.

In addition to creating project scope, grocery customers experienced difficulty meeting the OBF requirement of a five-year project payback. Customers were motivated to use the financing to help offset the price tag of high-cost measures that otherwise could not have been completed. However, these high-cost measures also meant longer payback periods that would typically exceed the OBF five-year maximum. ESG leveraged the customer's existing audit data to identify measures with lower payback that could be added to the project scope and bring the overall payback down to five years or less. By coupling measures with higher and lower payback, ESG was able to design projects that would not only meet the OBF program requirements but also achieve more comprehensive and greater energy savings.

### **Involving Stakeholders to Improve Program Design**

The OBF program team has been working on continually improving the program's processes. This effort is driven largely by receiving continual feedback from stakeholders both within and outside of PG&E, as well as studying industry best practices. This feedback loop has led to a heavy focus on ensuring that any duplicative and unnecessary processes are removed to speed up processing time without sacrificing the underwriting integrity of the program and protections for customers. The OBF program team focused on streamlining and standardizing the application process so it would be easier to understand and work with for the program stakeholders. Additionally, the program team worked to increase the amount of information that is available to PG&E's Customer Relationship Managers, other program managers, and PG&E's Third Party implementers, such as ESG. The availability of information helped to open up the "black box" of the OBF process so that program stakeholders could have visibility into their project status and how OBF utilized the submitted information.

One example of stakeholders informing a successful process improvement involves a large National grocery chain customer's request to exceed the \$1 million OBF loan cap to complete a set of projects across an additional 16 store sites after having completed 48 sites. For these specific projects, the PG&E Third Party programs ("3P") team approached the OBF team about helping ESG complete all of these projects by the end of 2013. The initial discussion involved the importance of these projects in helping 3P and ESG achieve their yearly energy savings goals. In order to support these programs in achieving their goals, while also supporting OBF initiatives in driving deeper retrofits, the OBF program team analyzed the situation to see how they could help these projects get done.

The first step to resolving the internal PG&E administrative issues for these projects was to understand what needed to be done to allow the customer to receive more than \$1 million in OBF loans from the program. Once it was determined that this \$1 million limit was set internally and was not in the program's binding rate schedule, the OBF program team brought the issue to the program director. After working with the 3P team to evaluate the amount of energy savings that these projects would bring in by the end of the year, taking into account the customer's credit worthiness, and the great working relationship that PG&E has had with ESG, the program director was able to approve an exception for these projects to move forward.

When new challenges to the established OBF process appeared, the OBF Loan Operations team, the OBF program team, 3P team, and ESG worked together to create standardized processes. A key element to the successful and timely completion of these projects was the coordination between these groups on working through the application process. Particularly important for having this 16-store project move through smoothly was the 3P team's facilitation of early communication. When the 3P team and ESG gave the OBF program team

advanced notice that this large number of projects was moving through the pipeline, the OBF program team was able to prepare for the influx of applications. The program team was able to provide enough time for review which enabled thoughtful discussion of and eventual exception to the \$1 million project loan limit. By providing ESG with a detailed walk-through of the process, stating the requirements for each project to move through smoothly, and ensuring that the information provided to the OBF team was complete and accurate, the process of reviewing each application was accelerated and did not disrupt other workflows for the PG&E Loan Operations team.

## **Engaging Market Partners**

ESG sought to engage market partners in order to complete OBF projects on a large scale. Despite the financing available through the OBF program, grocery customers were not able to front initial out-of-pocket costs of completing projects in large volumes across multiple store sites and wait for reimbursement from the OBF program. Additionally, large-scale projects were typically installed by a contractor specializing in a particular measure and did not result in comprehensive projects. To overcome these barriers, ESG leveraged existing relationships with market partners to build comprehensive, large-scale projects that could access OBF financing, often coordinating two or more installation contractors for each project.

In order to achieve the installation of projects on a large scale, the program engaged market partners, such as distributors, product manufacturers and local contractors to float the initial project cost and act as the payee for the OBF loan. Market partners, such as contractors, were initially hesitant to front the project costs as they were uncertain of the OBF process and timeline to receive the loan payment. ESG played a key role in facilitating the OBF projects and giving contractors confidence in the OBF process. Historically ESG acted as the neutral third party between the customer and multiple contractors and had built trusted relationships over the years. ESG's past project experience and understanding of the OBF process gave contractors assurance to shoulder the risk of carrying project installation costs. The contractor's ability to float these costs resulted in a greater number of OBF project installations in a shorter period of time.

Additionally, ESG was able to act as the central point of coordination to facilitate project installation between multiple contractors, as grocery store facilities consist of multiple complex systems like lighting, refrigeration and HVAC. The complexity of these systems often requires contractors to specialize in one system, resulting in energy efficiency measures to be completed separately. By acting as the primary point of coordination and leveraging OBF, ESG enabled multiple specialized contractors to complete energy efficiency measures simultaneously, resulting in a more comprehensive project scope.

## **Results**

The strategies listed above were successful in overcoming initial barriers to utilizing OBF, allowing greater customer adoption. Customer uncertainty was resolved through direct assistance from the ESG program and clarification of the OBF loan process. Overall processing time was successfully reduced by coordinating with program stakeholders to streamline administrative processes, and employ existing and accurate audit data. Project implementation was successful as a result of ESG leveraging existing relationships with customers and market partners. These strategies resulted in more comprehensive, higher savings on a larger scale.



## Comprehensive Savings

The combination of addressing customer uncertainty, cutting processing time, leveraging audit data and coordinating market partners enabled customers to access OBF to complete more comprehensive energy efficiency projects with higher savings per project. In comparing ESG projects that did versus did not utilize OBF, the average number of measures per project doubled (Figure 1), while the average savings per project more than tripled (Figure 2). The types of measures installed with and without OBF were similar, however OBF enabled multiple measures to be completed at one time instead of spread across multiple projects.

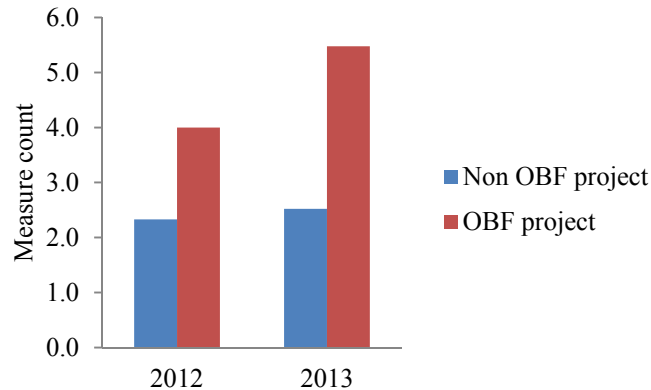


Figure 1. Average measure count per EnergySmart Grocer project, 2012-2013. *Source:* PECI 2013.

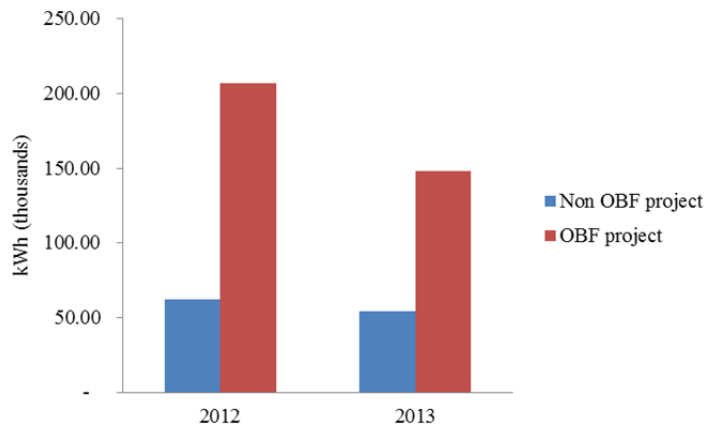


Figure 2. Average kWh per EnergySmart Grocer project, 2012-2013. *Source:* PECI 2013.

These figures demonstrate that customer projects utilizing OBF achieved higher savings and resulted in a greater number of energy efficiency measures completed than those projects that did not go through the OBF program. These results reflect the original intention of implementing OBF and show great promise for future energy efficiency projects.

## Achieving Scale

Once ESG and PG&E were able to overcome customer and administrative challenges and successfully engage customers in the OBF program, there was a greater focus on process improvements that would further streamline project completion. Through strategies that involved stakeholder feedback, informing project scope and engaging market partners, ESG and PG&E were successful in achieving scale.

The best example of this success can be seen in the project that was completed with the previously referenced large National chain grocery customer with over 150 store locations in the PG&E territory. ESG has been working with the customer for more than five years to identify and develop energy efficiency opportunities. Despite many proposals for energy efficiency projects, the customer was unwilling to complete suggested projects due to the high upfront costs. Following the introduction of OBF, however, the customer agreed to complete projects at 20 store sites utilizing OBF.

Several strategies were applied to this example to ensure the success of the project. ESG leveraged existing audit data to inform and develop the project scope that would meet the OBF requirements. Together, PG&E and ESG formalized processes that would allow large volumes of project applications to be submitted. ESG partnered with a leading global electrical distributor and multiple contractors in order to float the cost of projects until OBF loan was paid. The scale of the project and potential net profit incentivized the contractor to shoulder the risk. As the OBF administrative process became more streamlined, contractors could expect payment within a more reasonable time period.

As a result, the customer has completed significant energy efficiency projects at over 64 stores locations over the last two years<sup>6</sup>. The customer is currently in the fourth phase of store project implementation and plans to complete further retrofits at nearly all store locations. This example illustrates how scale was achieved through the OBF process, resulting in greater energy savings in a shorter period of time.

## Streamlined Administrative Process

The steps that the OBF program and Operations teams have taken to streamline the OBF process and increase the communication between all OBF stakeholders has produced dramatic improvements in the processing time of projects going through OBF. The figure below demonstrates the reduction in number of days to complete a project utilizing OBF over time.

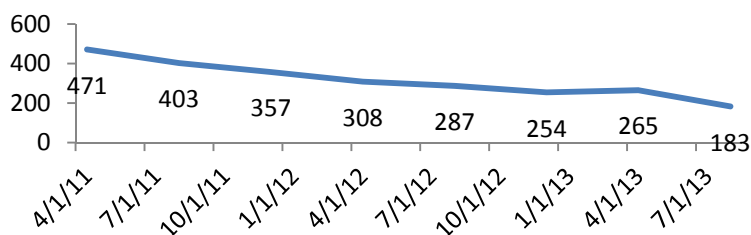


Figure 3. OBF Total Project Time (Number of Days). *Source:* PG&E 2014.

<sup>6</sup> Over the last 2 years, the national chain customer referenced, saved an estimated 10,107,900 kWh and 1,213 kW annually, for the 64 sites completed. (DEER 2013)

By working with ESG, the OBF program team was able to not only help ESG finish these specific projects with the customer, but also set up a template for how OBF can work with these types of requests in the future. The OBF program team has been able to cut down on the guess work required from implementers and customers when using OBF to complete a large number of projects in a short period of time.

By having an up-front conversation about the applications that were going to be submitted by ESG, the OBF program team was able to streamline the process of submitting multiple projects simultaneously. This streamlined application process will work very well for projects where the implementer is focusing on installing a simple set of measures in a large number of similar facilities. With sufficient up-front discussion on these projects, the OBF program will be able to process these with minimal disruption of any other projects coming through the OBF pipeline. This experience has led the OBF program team to create guidelines for commercial customer requests to exceed the internal cap for total loan amount outstanding and for simultaneously processing large volumes of standardized project applications.

## **Looking Ahead**

PG&E's OBF program is expected to continue functioning largely unchanged through at least 2015. The OBF program team is continuously working on finding synergies with various types of projects that are being completed in the field. The ESG collaboration is an outstanding example of how the OBF program can bring value to these types of projects to push them across the finish line. Additionally, the OBF program is striving for continuous improvement in processing times, communications to stakeholders, and the overall application process. One example of such continuous improvement is the roll out of a Salesforce.com based tool called Energy Insight. This tool will allow for improved communication between the OBF program and PG&E's incentive programs, including real time tracking of loan statuses by project stakeholders.

To supplement the current California IOU financing options through OBF, the four California IOUs are working on rolling out additional financing pilots to provide customers with multiple new options for financing their energy efficiency and other demand side projects. The IOUs will be facilitating seven financing pilots, including four that are aimed at non-residential customers. While these pilots will not be interest free like OBF, they will provide customers with a variety of ways to finance a wider range of projects than they are able to do under OBF.

Lessons are repeatable for any customer type that is interested in doing multiple projects through OBF, or any other financing option. The process used for utilizing OBF to complete these projects can be applied to any similar type of process with a customer in good credit standing. Whether it is for a customer that owns many locations of its own business, such as grocery stores, gas stations or bank branches, or a property owner that owns and leases out a number of similar properties, any of these projects could be a good fit.

For implementers, these projects can demonstrate how they can use OBF to do a large number of similar projects in a streamlined fashion. By learning the OBF process and working with both the Third Party and OBF program teams from the onset, the implementer can reap all of the benefits of OBF without having to add a lot of time for paperwork or processing wait times. For utilities, these projects can demonstrate how to utilize the OBF programs to drive large amounts of savings for their energy efficiency programs. By maintaining some flexibility in program design, the programs can be leveraged in ways previously not thought possible.

## Conclusion

New programs frequently experience challenges entering the market during the startup phase. Despite the many benefits offered by OBF, customer uncertainty and internal administrative challenges prevented initial adoption. In response to these barriers, PG&E and ESG developed several strategies not only to increase customer adoption but to streamline the entire OBF process. These strategies included defining the OBF application process to increase customer confidence and involving key stakeholders in order to identify process improvements. ESG leveraged existing data and customer relationships in order to ensure successful OBF application and project scope. Additionally, market partners were engaged to create more scalable projects.

The implementation strategies were successful in achieving more comprehensive energy efficiency projects with higher savings per project. ESG and PG&E were also able to develop systems to facilitate a larger volume of projects. For PG&E, streamlined administrative processes not only reduced the overall processing time period but allowed a system for dealing with anomalies.

Going forward, OBF is expected to continue having a positive impact on grocery customers' ability to complete more comprehensive projects with deeper savings. As new financing options are introduced, PG&E and ESG will leverage the strategies developed here and apply the lessons learned.

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